

2013-2014 Seedling Order Form

GEORGE O. WHITE STATE FOREST NURSERY



Serving nature and you[®]

Weathering the Storm

What a year! The weather at George O. White State Forest Nursery was extreme at times over the past 12 months. The summer of 2012 was extremely dry across all of Missouri and the Midwest. This affected seed production and seed quality. We were limited in what we could purchase to plant for your seedling needs this season. In addition, the spring of 2013 at the nursery was cool and wet. This delayed germination and growth of the seedlings by two to three weeks. The oaks seem to be affected the most and a couple of species didn't germinate. On Aug. 6, 2013, the Nursery received more than 6 inches of rain in a short period of time. Due to the flash flooding we had some damage to our roads, irrigation system, and shortleaf pine seedlings. What is the effect of these weather events? We will still be providing you with the best quality seedlings but the numbers available of some species will be reduced. Some of the species such as white oak, deciduous holly, American

beautyberry, and flowering dogwood will be a couple of inches smaller than normal. Remember to order early because we will sell out of some species due to the limited quantities. Please check the website, mdc.mo.gov/node/3328, for species available in limited supply.

George Clark, forest nursery supervisor

Forest and Woodland Association of Missouri

The Missouri Department of Conservation has partnered with the Forest and Woodland Association of Missouri (FWAM) to keep trees and woodlands in the state healthy for all residents. FWAM provides outreach to landowners, homeowners, and others interested in Missouri's trees. New members will receive 10 free seedlings from the Missouri Department of Conservation of any one species (based on availability). "We see this as a great opportunity to promote FWAM membership as they take on many challenges facing our woods and forests," says Lisa Allen, Missouri state forester, Missouri Department of Conservation. For more information on Joining FWAM and receiving your gift of 10 free trees, visit forestandwoodland.org, email jim3587@aol.com, or call 818-645-5399.

Help Your Bareroot Seedling Break Bud Dormancy

Over the past couple of years there have been reports of pecan and flowering dogwood not breaking bud dormancy. The Kansas Forest Service says, "Some plants benefit with storage at higher temperatures. Strong drying winds may desiccate tree tissue, and the buds may fail to break. Some species overcome this problem by being 'sweated.' Keep the top and root covered with moist sawdust, hay, or such at room temperature. Once buds swell, ready to pop into growth, planting should proceed." Sweating of seedlings should only be done after there is no risk of frost.

For more information on how to properly sweat your bareroot seedlings, visit:

waa-isa.org/pdf/mayjun2007/MayJun07-BarerootNurseryStock.pdf

www2.ca.uky.edu/HLA/Dunwell/LnrSweat.html

Seedlings

We provide mainly 1-year-old bareroot seedlings. A few species are 2 to 3 years old. The size of the seedlings varies greatly depending on the species selected. Seedlings are provided in quantities of 10, 25, or 100 trees per species.

Order Early

Orders can be submitted by Internet, mail or fax. **No phone orders are accepted.** When you submit your order, you should receive a billing card from us within two weeks.

Before undertaking any extensive planting project, consult the Conservation Department's regional office in your area.

For information on planting, care and uses of seedlings listed in this order form, send for the following publications or visit mdc.mo.gov/node/3352.

To purchase the following books, call toll free 1-877-521-8632, or go to mdcnatureshop.com. Prices do not include shipping, handling, and tax.

- ☞ *Trees of Missouri Field Guide*
(soft cover \$7.50)
- ☞ *Shrubs and Woody Vines of Missouri*
(soft cover \$16.50)
- ☞ *Shrubs and Woody Vines of Missouri Field Guide*
(soft cover \$7.50)
- ☞ *Tried & True Missouri Native Plants For Your Yard*
(soft cover \$6)

The following guide can be purchased for \$1 at your local University of Missouri Extension Office or at extension.missouri.edu/p/G5006

- ☞ *Before You Order Tree Seedlings*
G5006



If you do not receive a billing card, call 573-674-3229 to inquire about the status of your order. To get the plants you want, please send your order as soon as possible. We sell out of some species quickly. If a species is sold out at the time your order is received, you will not be billed for that species. Please check your billing card. If the seedlings become available at a later date, you will be notified by mail. We accept orders until April 15, 2014. For a recorded message about possible shipping delays and available inventory, call 1-800-392-3111 after Dec. 1, 2013.

Cost

Price per seedling quantities range from \$6 to \$32, see pricing chart below. Sales tax of 5.725 percent will be added to all orders unless a tax exemption certificate is provided. There is a \$5 handling charge added to each order. Out-of-state shipping is \$7 per 100 seedlings with a \$7 minimum.

Do not send payment with your order.

You will only be charged for species that are available. Check your billing card to see the availability of the trees you ordered. You can select the option to have us substitute suitable species for you. If the sold-out seedlings become available later, we will send a billing card in the mail.

Price per seedling			
Species	Available in 10 only	Available in increments of 25	
		25-75	100+
Shortleaf, Loblolly pine, Pitch loblolly pine	\$0.60	\$0.28	\$0.16
Eastern white pine, Red pine, Norway spruce, Eastern red cedar	\$0.80	\$0.40	\$0.32
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
<i>Orders of multiple species of 10s or 25s cannot be combined for volume discount.</i>			

Payment

After your order has been processed, you will receive a billing card in the mail. This card will list trees we can provide. Please check the accuracy of the information. The billing card will have a due date, as well as information on how to make the payment for your trees. If payment is not received within five days after the due date, the order will be cancelled and the stock sold. We accept check, money order, Visa, MasterCard, and Discover. Please write your order number on your check. **All orders must be paid in full before they can be shipped or picked up.**

If you submit an order by mail, fax, or via the Internet, you should receive a billing card from us within about two weeks. If you DO NOT receive a billing card from us, call the nursery at 573-674-3229 to inquire about the status of your order.

Heritage Card Discount

If you have a Heritage Card, you can receive a 15 percent discount up to \$20 off your seedling order. Make sure to include your Heritage Card number when you place your order. This discount does not apply to handling charges and sales tax. The card also gives you a 15 percent discount on selected retail merchandise sold at Department facilities. Heritage Cards can be purchased for \$2 wherever hunting and fishing permits are sold, or by calling 1-800-392-4115.

Delivery

You can have your trees shipped or you can pick them up at the nursery. Please select the delivery method and month you want your trees delivered. We ship with UPS only and cannot process PO Box deliveries. We ship orders February through May, unless other arrangements have been made. You will receive a postcard approximately one week before your trees will arrive or are ready for pickup. Most orders arrive within 48 hours after they leave the nursery; however, this cannot be guaranteed. If any or all of your order has not arrived within two weeks of receiving the postcard, please contact the nursery.

Order Changes and Refunds

To request an order change, contact the nursery. Adjustments or refunds will be made only at the discretion of the nursery. No refunds will be given for orders cancelled after May 1, 2014. No refund of \$2.50 or less will be made. Please notify us promptly of any address change and include your order number.

Contact Information

George O. White State Forest Nursery
Missouri Department of Conservation
PO Box 119
Licking, MO 65542
573-674-3229 Fax: 573-674-4047

Spacing of Seedlings

When planting seedlings, consider the height and spread to which they will eventually grow and their primary use. As a general rule, seedlings should be spaced as shown below:

Purpose	Spacing	Purpose	Spacing
Erosion control	3-6 feet	Wildlife shrubs	3-6 feet
Reforestation	8-12 feet	Windbreaks	5-12 feet

Quantity of Seedlings per Acre			
Spacing in feet	Seedlings per acre	Spacing in feet	Seedlings per acre
3x3	4,840	8x8	681
4x4	2,722	9x9	538
5x5	1,742	10x10	436
6x6	1,210	12x12	302
7x7	889	15x15	194



100 - Shortleaf pine



101 - Loblolly pine



102 - Pitch x Loblolly pine



106 - Eastern red cedar



211 - Eastern white pine



214 - Red pine



216 - Norway spruce



302 - Sycamore



300 - Black walnut



301 - Pecan



304 - Hackberry



305 - Northern red oak



306 - Bur oak



307 - White oak



310 - Tulip poplar

Price Per Seedling			
Species	Available in 10 only	Available in increments of 25	
		25–75	100+
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
Shortleaf, Loblolly pine, Pitch loblolly pine	\$0.60	\$0.28	\$0.16
Eastern white pine, Red pine, Norway spruce, Eastern red cedar	\$0.80	\$0.40	\$0.32
Orders of multiple species of 10s or 25s cannot be combined for volume discount.			

Item Number	Species	Common Uses				Wildlife Benefits			Other Important Facts
		Wind Break	Erosion Control	Reforestation	Wetland Restoration	Food	Cover	Mature Height in Feet	
100	Shortleaf pine (<i>Pinus echinata</i>)	✓		✓			✓	80–100	Only pine native to Missouri. Grows to 2–3 feet in diameter. Does very well on dry, upland sites in the Ozarks. Probably should not be planted north of the Missouri River.
101	Loblolly pine (<i>Pinus taeda</i>)	✓		✓			✓	90	Native throughout the southern United States. Introduced and grows well in southern Missouri. A fast-growing pine that is an important timber tree for lumber and pulp. Similar in appearance to shortleaf pine, but has longer needles and a larger cone. Grows on a wide variety of sites including poor, dry upland and rich bottomland soils.
102	Pitch x Loblolly pine (<i>Pinus rigida</i> x <i>Pinus taeda</i>)	✓	✓	✓			✓	60	This hybrid pine combines the cold hardiness and drought tolerance of pitch pine with the larger mature size, moist soil tolerance, and fast growth of loblolly pine. Develops a dense, extensive root system that helps it adapt to extreme soil conditions. The long, naturally shed needles are used for pine straw mulch in the landscaping industry. Does best in full sun to partial shade.
106	Eastern red cedar (<i>Juniperus virginiana</i>)	✓			✓	✓	✓	60	Eastern red cedar's aromatic wood is valuable for closet lining and novelties. Excellent for wildlife and windbreak plantings.
211	Eastern white pine (<i>Pinus strobus</i>)	✓		✓			✓	80–100	A tall, stately tree with an attractive conical shape and branches nearly to the ground in open stands. Makes an excellent windbreak throughout the state. Adapts to a variety of sites, but prefers moderately moist, sandy loam soils.
214	Red pine (<i>Pinus resinosa</i>)	✓		✓			✓	80	A long-needled pine native to the Lake States and New England. Best used for reforestation and windbreaks north of Missouri River.
216	Norway spruce (<i>Picea abies</i>)	✓					✓	50	Excellent tree for windbreak and wildlife cover. Although not immune to deer damage, deer generally leave this evergreen alone. This fast-growing spruce grows best on well-drained soils and will tolerate a lot of shade. It will retain its dense drooping branches as the tree matures.
300	Black walnut (<i>Juglans nigra</i>)			✓	✓	✓		80–90	The "black gold" of Missouri. Valued for its lumber and nuts, it is extensively cultivated statewide. Grows rapidly on deep, rich, alluvial soils. Growth rates decline rapidly in poor soils.
301	Pecan (<i>Carya illinoensis</i>)			✓	✓	✓		90	Most noted for edible nuts, but also is valued for wood. Does best on moist, well-drained river bottoms. Seedlings are grown from native wild seed.
302	Sycamore (<i>Platanus occidentalis</i>)		✓	✓	✓		✓	80–100	A large bottomland, streambank tree. Can be used as a bank stabilizer along with other bottomland species. Shows a great deal of resistance to beaver damage and wet soil conditions.
304	Hackberry (<i>Celtis occidentalis</i>)	✓	✓	✓	✓	✓		90	Common bottomland species found statewide. Does very well in prairie regions. Birds eat the fruit.
305	Northern red oak (<i>Quercus rubra</i>)	✓	✓	✓		✓	✓	90	One of the most widespread and commercially important of the oaks. Found on a wide variety of sites statewide. Grows best in fertile, sandy loam soils.
306	Bur oak (<i>Quercus macrocarpa</i>)		✓	✓	✓	✓		80	Large acorns with fringed caps are characteristic of this oak. Grows statewide on a variety of sites including dry uplands and moist lowlands. Reaches 3–4 feet in diameter.
307	White oak (<i>Quercus alba</i>)			✓		✓	✓	85	Found statewide. This important hardwood lumber tree is often an excellent acorn producer. Does best on deep well-drained soils, but does well on dry, poor upland sites. Slow growth rate, but may live for hundreds of years.
310	Tulip poplar (<i>Liriodendron tulipifera</i>)	✓		✓				90–100	One of the more valuable hardwoods. May reach diameters approaching 2 feet. Found naturally on moist, well-drained soils in southeastern Missouri. Planted widely as an ornamental.



311 - Cottonwood



313 - Black locust



315 - Sweetgum



316 - Bald cypress



317 - Silver maple



319 - River birch



323 - Black cherry



324 - Chinkapin oak



326 - Blackgum



330 - Swamp white oak



331 - Shellbark hickory



333 - Swamp chestnut oak



336 - Black oak



337 - Nuttall oak



338 - Cherrybark oak



339 - Willow oak

Price Per Seedling			
Species	Available in 10 only	Available in increments of 25	
		25–75	100+
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
Orders of multiple species of 10s or 25s cannot be combined for volume discount.			

Item Number	Species	Common Uses				Wildlife Benefits			Other Important Facts
		Wind Break	Erosion Control	Reforestation	Wetland Restoration	Food	Cover	Mature Height in Feet	
311	Cottonwood (cuttings) (<i>Populus deltoides</i>) See how to plant cuttings on Page 12.	✓	✓	✓	✓		✓	100	One of the largest and fastest-growing trees in the eastern United States. Grows best in deep, well-drained bottomland soils. Can reach diameters of 3–4 feet.
313	Black locust (<i>Robinia pseudoacacia</i>)	✓	✓					60	A medium-sized tree found on a wide range of sites. Wood is durable and has been used for fence posts. Due to rapid growth rate and relatively high B.T.U. content, it is often planted in wood lots. Also used to control soil erosion.
315	Sweetgum (<i>Liquidambar styraciflua</i>)	✓	✓	✓	✓			80–100	Native to the lowlands and foothills of southern Missouri. Planted extensively statewide. Does best in deep, moist soils. Yellow, orange, and red fall color. Valuable timber tree that can grow 3–4 feet in diameter.
316	Bald cypress (<i>Taxodium distichum</i>)	✓	✓	✓	✓			90–100	Large trees that may live more than 1,000 years. Commonly associated with southeastern swamps, but adapt easily to a wide range of sites. Young trees grow rapidly on good sites and may reach 20 feet in height in 10 years. Extremely durable wood.
317	Silver maple (<i>Acer saccharinum</i>)		✓	✓	✓		✓	90	A large bottomland “soft” hardwood. Grown commercially for wood. Perhaps overused as a fast-growing shade tree. Because of the wood’s brittleness, breakage in ice and wind is a problem.
319	River birch (<i>Betula nigra</i>)	✓	✓		✓		✓	60	A small- to medium-sized streambank tree useful for bank stabilization. Peeling, flaking bark gives the tree an attractive appearance in winter. Grows statewide.
323	Black cherry (<i>Prunus serotina</i>)		✓	✓		✓	✓	60	Found statewide on a variety of sites including moist, fertile bottoms and dry, gravelly upland soils. The lumber is second only to walnut in demand as a fine hardwood. The flowers are white clusters 2 to 4 inches long. The red to black fruits ripen in August and are abundant nearly every year. Numerous wildlife species eat the fruit. Leaves turns yellow to red in the fall.
324	Chinkapin oak (<i>Quercus muehlenbergii</i>)			✓		✓	✓	70	Found throughout Missouri mostly on dry upland woods, along bluffs, and in glades. It tolerates very dry, rocky soil, but will grow on a wide variety of sites. This tree is in the white oak group, has silver-gray bark and long, thin leaves. The acorns are nearly black, about ¾ to 1 inch long and are a favorite food source for turkey and deer.
326	Blackgum (<i>Nyssa sylvatica</i>)			✓	✓	✓	✓	65	Medium-sized tree found in southern Missouri, but can be planted successfully statewide. Grows on deep, moist soils and along streams. An attractive tree with shining dark-green leaves, blue-black fruits, and brilliant red fall color. Older, larger trees often contain hollows that are used by cavity-nesting wildlife.
330	Swamp white oak (<i>Quercus bicolor</i>)		✓	✓	✓	✓	✓	70	A fairly fast-growing, medium-sized tree that may reach a diameter of 3 feet. Grows naturally in the northern two-thirds of the state along low hills and stream bottoms, but is adaptable to a wide variety of sites. Despite its name, this species does not naturally grow in swamps. The acorns are one of the favored fall foods for deer, turkey, and many other wildlife species.
331	Shellbark hickory (<i>Carya laciniosa</i>)			✓	✓	✓		90	A large scaly bark hickory that grows best on rich bottomland soils. It produces the largest nut of any hickory. Not found naturally in the Ozarks, but will grow statewide.
333	Swamp chestnut oak (<i>Quercus michauxii</i>)			✓		✓	✓	85	Also called cow oak and basket oak. A large well-formed tree, which grows in well-drained soils above the floodplain in southeastern Missouri. Able to withstand flooding for short periods during the dormant season.
336	Black oak (<i>Quercus velutina</i>)			✓		✓	✓	85	Found statewide, but most common in the Ozarks. Does well on dry, poor upland sites, but will make good growth on better sites. Good acorn producer.
337	Nuttall oak (<i>Quercus texana</i>)		✓	✓	✓	✓	✓	90–100	Relatively fast-growing oak that is found in the Southeastern Lowlands. Does well on heavy, poorly drained clay soils. General appearance somewhat resembles pin oak. Probably should not be planted outside the Bootheel.
338	Cherrybark oak (<i>Quercus falcata</i> var. <i>pagodifolia</i>)		✓	✓	✓	✓	✓	100	Southeastern Lowland oak that should be planted in Missouri Bootheel area. Prefers rich, well-drained bottomland soils. Large, fast growing, well-formed and commercially important.
339	Willow oak (<i>Quercus phellos</i>)	✓	✓	✓	✓	✓	✓	70	This tree gets its name from the long, slender, willow-like leaves. Native to southeastern Missouri, but will grow statewide. Does best on poorly drained soils, but can be planted on a variety of sites. Fast-growing oak with small acorns.



340 - Overcup oak



343 - Kentucky coffeetree



345 - Shumard oak



350 - Sandbar willow



400 - Pin oak



402 - Flowering dogwood



405 - Persimmon



406 - Pawpaw



409 - Smooth sumac



410 - Roughleaf dogwood



413 - Buttonbush



414 - Deciduous holly



417 - Redbud



424 - Wild plum

Price Per Seedling			
Species	Available in 10 only	Available in increments of 25	
		25–75	100+
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
Orders of multiple species of 10s or 25s cannot be combined for volume discount.			

Item Number	Species	Common Uses				Wildlife Benefits			Other Important Facts
		Wind Break	Erosion Control	Reforestation	Wetland Restoration	Food	Cover	Mature Height in Feet	
340	Overcup oak (<i>Quercus lyrata</i>)		✓	✓	✓	✓	✓	70	Occurs naturally in southeastern Missouri and up the Mississippi River to St. Louis. Grows on wet, poorly drained sites and is one of the most flood-tolerant species. This slow-growing tree produces acorns that are almost enclosed in the cap.
343	Kentucky coffeetree (<i>Gymnocladus dioica</i>)	✓	✓	✓				70–90	Medium to large tree preferring good soil. Found statewide, but most common in western Missouri. Large, persistent seedpods and short, heavy twigs makes this legume distinctive in winter.
345	Shumard oak (<i>Quercus shumardii</i>)	✓	✓	✓	✓	✓	✓	80–100	A large, commercially valuable oak found naturally in all but the northern third of Missouri. Frequently grows in association with northern red oak and white oak. Can be planted on a wide variety of sites.
350	Sandbar willow (cuttings) (<i>Salix interior</i>) See how to plant cuttings on Page 12.		✓		✓		✓	30	Shrub-like, thicket-forming willow found statewide. Occurs on sand bars and muddy stream banks. Good soil binder and bank stabilizer that prevents erosion. Leaves and twigs are browsed by deer.
400	Pin oak (<i>Quercus palustris</i>)	✓	✓	✓	✓	✓	✓	70–80	This fast-growing oak grows naturally on poorly drained, heavy bottomland sites statewide. It is often used for landscaping as it will grow well on a wide variety of sites, from wet to dry. The small acorns are eaten by many mammals and birds and are an important winter food for migrating waterfowl.
402	Flowering dogwood (<i>Cornus florida</i>)					✓	✓	40	Missouri State Tree. This small to medium understory tree does best when planted in shade. Grown from seed collected from wild white-flowered trees.
405	Persimmon (<i>Diospyros virginiana</i>)	✓	✓	✓	✓	✓		60–70	A small- to medium-sized tree whose fruit is valuable to people and wildlife. Among the hardest of North American woods. Male and female flowers are borne on separate plants, so plant several trees near each other.
406	Pawpaw (<i>Asimina triloba</i>)					✓	✓	20	This small tree has large, drooping, pear-shaped leaves that are slightly aromatic. Inconspicuous flowers are green upon opening but turn maroon as they develop. Edible yellow-green fruits are 3 to 6 inches long and ripen in September. Leaves turn bright yellow in fall.
409	Smooth sumac (<i>Rhus glabra</i>)					✓	✓	20	Thicket-forming shrub or small tree is found statewide in old fields, prairies, woods borders and road rights of ways. Was widely used by Native Americans and early settlers for medicinal uses. Provides excellent wildlife food and cover. Dark-green summer foliage is followed by scarlet fall color and red berries.
410	Roughleaf dogwood (<i>Cornus drummondii</i>)	✓				✓	✓	20	This thicket-forming shrub found statewide on a wide variety of soils survives poor sites better than other dogwoods. Leaves are rough textured. It does not have large white flowers like flowering dogwoods, but small white flowers appear in May. The shrub has white berries and purple to red fall color.
413	Buttonbush (<i>Cephalanthus occidentalis</i>)		✓		✓	✓	✓	18	Found throughout the state in low, wet woods, swamps and along borders of streams and ponds. The flowers are fragrant, white, round clusters about 1 to 1½ inches across and are a favorite nectar source for bees. Many birds eat the nutlets and nest in the branches. Does best on moist sites.
414	Deciduous holly (<i>Ilex decidua</i>)	✓			✓	✓	✓	25	Also called possumhaw, this small- to medium-sized tree produces regular crops of brilliant red fruit on the female plant. The male and female flowers are borne on separate plants so several trees should be planted near each other. After the leaves fall, the fruit is visible for long distances and helps feed birds in winter and early spring when other foods are depleted.
417	Redbud (<i>Cercis canadensis</i>)	✓				✓	✓	30	A small to medium understory tree with showy pink flowers in early spring. This legume is an attractive addition to wildlife or windbreak plantings.
424	Wild plum (<i>Prunus spp.</i>)	✓	✓		✓	✓	✓	25	A small thicket-forming tree. One of the first trees to bloom in the spring. Produces a bright-red edible fruit. Provides excellent food and cover for wildlife.



426 - Aromatic sumac



434 - Washington hawthorn



436 - Ninebark



437 - Gray dogwood



439 - Witch hazel



440 - Serviceberry



443 - Red mulberry



447 - Silky dogwood



448 - Buckbrush



456 - False indigo



458 - Elderberry



462 - Black chokeberry



463 - Carolina buckthorn

Price Per Seedling			
Species	Available in 10 only	Available in increments of 25	
		25-75	100+
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
Orders of multiple species of 10s or 25s cannot be combined for volume discount.			

Item Number	Species	Common Uses				Wildlife Benefits			Other Important Facts
		Wind Break	Erosion Control	Reforestation	Wetland Restoration	Food	Cover	Mature Height in Feet	
426	Aromatic sumac (<i>Rhus aromatica</i>)	✓	✓			✓	✓	8	A shrub found over much of the state, usually in thickets. Bright-red fruit ripens in late spring or early summer and is eaten by many birds. Also called fragrant sumac.
434	Washington hawthorn (<i>Crataegus phaenopyrum</i>)	✓				✓	✓	25	A small- to medium-sized tree with showy white flowers in spring and bright red fruit in the fall.
436	Ninebark (<i>Physocarpus opulifolius</i>)	✓	✓		✓		✓	8	A streamside shrub found over much of the state. Forms a massive root system quickly after planting, making it useful to control erosion on streambanks. It is also used as an ornamental. Its name is taken from the way the mature bark curls away from the stem resembling the number 9.
437	Gray dogwood (<i>Cornus racemosa</i>)	✓				✓	✓	10	Similar in appearance to roughleaf dogwood, this tree is smaller and has smooth leaves. Found widely scattered statewide on both moist and rocky sites. Forms thickets by root suckers. Provides excellent wildlife food and cover.
439	Witch hazel (<i>Hamamelis vernalis</i>)	✓	✓			✓	✓	10	Large shrub found in and along dry, rocky streambeds. Leaves are collected for medicinal uses. Shrub is valuable for wildlife food and cover, and for controlling erosion along streams.
440	Serviceberry (<i>Amelanchier arborea</i>)					✓	✓	25	The showy white flowers of this large shrub/small tree are the first to appear in Missouri woodlands each spring. Reddish sweet-tasting fruits are edible but quickly consumed by wildlife. Fall color varies from yellow to orange to red. Found statewide, grows best in partial shade along woodland edges.
443	Red mulberry (<i>Morus rubra</i>)			✓		✓		50	Medium-sized tree found statewide. Prefers good soil, but can be found on poor sites. Many animals eat the fruit.
444	Mixed oak (<i>Quercus spp.</i>)	✓	✓	✓	✓	✓	✓	varies	Grown from seed that was mixed during collection or collected in quantities too small to handle separately. A good selection for general wildlife plantings where a variety of nut sizes and tree form is desirable.
447	Silky dogwood (<i>Cornus obliqua</i>)	✓			✓	✓	✓	9	This species, also called swamp or pale dogwood, is found statewide except in the lowlands of the Bootheel. Grows in moist ground along streams, rocky banks, spring branches, swamps, wet prairies, and low, wet woods. The flowers are similar to roughleaf and gray dogwood. The blue fruit is eaten by many wildlife species. Leaves are longer and narrower than other dogwoods.
448	Buckbrush (<i>Symphoricarpos orbiculatus</i>)					✓	✓	3	Also known as coral berry. A low-growing, thicket-forming shrub found throughout the state. Useful as quail and rabbit cover in areas with little woody vegetation. Small purplish-red fruits stay on the plant through much of the winter and serve as an emergency wildlife food late in winter or during extreme weather when other food is depleted.
456	False indigo (<i>Amorpha fruticosa</i>)		✓		✓	✓	✓	12	Found statewide in moist ground along streams, rocky banks, and low, wet woods. The flowers are 2 to 6 inches long with dense clusters of purple tube-shaped flowers. This shrub is in the legume family, and the seeds are eaten by quail and other wildlife. Bees and butterflies are attracted to the flowers.
458	Elderberry (<i>Sambucus canadensis</i>)		✓		✓	✓	✓	10	Found throughout the state in open woods, fence rows, roadsides, and along borders of streams and ponds. The flowers are large, showy, flat-topped white clusters that appear in late May to June. The dark-purple berries are edible and make an excellent jelly. Many species of birds and mammals eat the fruit, and deer browse the leaves and branches. Will tolerate both wet and dry sites.
462	Black chokeberry (<i>Aronia melanocarpa</i>)		✓		✓	✓	✓	10	This small shrub, with a spread of 5 to 6 feet, has large, shiny dark-green leaves that turn purple to orange and red in the fall. Flowers are white with five petals, about ½ inch across. The tart purplish-black fruit is about ¼ inch across and is best used to make jams or jellies. The juice is very high in vitamin C and various antioxidants. Does best in full sun or partial shade. Will grow on a wide variety of soils from wet to very dry.
463	Carolina buckthorn (<i>Rhamnus caroliniana</i>)	✓				✓		25	This shrub to small tree has leaves 4 to 6 inches long, oval, and are shiny bright green. The flowers are small and not showy, but the fruit turns orange in late summer to shiny black at maturity. The fruit is eaten by a variety of woodland birds, and deer will browse the twigs. It will tolerate a wide range of soils and grows well in the shade.



464 - American beautyberry



465 - Golden currant



466 - Rose mallow



623 - Slender bush clover

Price Per Seedling

Species	Available in 10 only	Available in increments of 25	
		25-75	100+
Hardwood trees and shrubs	\$0.80	\$0.40	\$0.32
Orders of multiple species of 10s or 25s cannot be combined for volume discount.			

Item Number	Species	Common Uses				Wildlife Benefits			Other Important Facts
		Wind Break	Erosion Control	Reforestation	Wetland Restoration	Food	Cover	Mature Height in Feet	
464	American beautyberry (<i>Callicarpa americana</i>)		✓			✓	✓	10	This rapidly growing, rounded shrub has a 4- to 8-foot spread. Tops will sometimes die back in cold winters, but flowering is on new growth, so dieback or drastic pruning will not affect flowering. Flowers are white to pale pink. The large pale-green leaves turn yellow in the fall. Showy, purple-blue fruits are attractive to birds and persist on the shrubs into late fall. Grows well in partial shade and on a wide variety of soil types.
465	Golden currant (<i>Ribes odoratum</i>)					✓	✓	6	This upright, drought-tolerant shrub has arching, spineless stems. Native to southwestern Missouri, but will grow statewide. The golden-yellow flowers emit a strong, clove-like fragrance. Fruit is dark-purple to black and eaten by birds and mammals. The fruits are edible and good for jams and jellies, but they are full of seeds. Does best in full sun or partial shade.
466	Rose mallow (<i>Hibiscus lasiocarpus</i>)				✓	✓	✓	8	This tall perennial is found in the south half of the state along sloughs, ponds and streams. Excellent for wetland plantings, pond edges, and other wet sites. Plants die back to the root collar each winter. Large showy white or sometimes pink flowers bloom from July through September. The seeds are eaten by ducks, quail, and many other birds.
623	Slender bush clover (<i>Lespedeza virginica</i>)					✓	✓	3	Grows statewide on a variety of sites. This warm-season perennial, which dies back to roots each winter, has small purple flowers. Seeds and stems are eaten by many wildlife species.

How to Plant Cottonwood and Willow Cuttings

Cottonwood and willow have the ability to sprout roots and leaves from a stick-like cutting. The cottonwood cutting is typically 18 inches long, and the willow 12 inches. Most of the cutting needs to be in the soil, so only leave 1 to 2 inches

out of the ground. Also the cutting must be planted with the buds pointed upward. All of the cuttings in a bundle point the same way, so you will only have to look carefully at one cutting per bundle.

2013-2014 SEEDLING ORDER FORM

Do not send money with your order.
You will be billed the correct amount.

Example ►

Date _____

Name _____

Address

City & State

ZIP

Telephone

Email Address

SHIPPING ADDRESS (if different from above)
No PO boxes. All orders will be shipped through UPS.

Name

Address

City & State

ZIP

Telephone

DELIVERY OF ORDER

Select delivery method by circling No. 1 or No. 2 below.
Also circle the desired month of delivery.

1. Ship my order from the nursery during
February, March, April, or May.
(Circle one month)
2. I will pick up my order at the George O. White
Nursery near Licking, Mo., during
February, March, April, or May.
(Circle one month)

My trees will be planted in _____ County.

HERITAGE CARD HOLDERS:

Enter the number of your Heritage Card.

6010-7700-

Heritage Card Number

Order Online! Visit mdc.mo.gov/node/3328

Phone orders are not accepted; but, if you have questions about seedlings ordered on this form, contact the George O. White Nursery at 573-674-3229.

April 15, 2014, last order date.

[illegible]☐ CHECK IF YOU WANT US TO SUBSTITUTE FOR SOLD-OUT ITEMS

OFFICE USE ONLY

User type _____

Order Type	1 ____ Normal	Tax	Normal _____
	2 ____ Free		Resale _____
	3 ____ Contract		Out of State _____
	4 ____ Normal, Ship N/PD		Non Profit _____
	5 ____ Contract, Ship N/PD Tax		Farmers _____

Applic 13 ☐ Yes ☐ No Mail ☐ Yes ☐ No

TAPE HERE

PLEASE
PLACE
STAMP
HERE

TREES
MISSOURI DEPARTMENT OF CONSERVATION
PO BOX 119
LICKING MO 65542-0119



FOLD
HERE

Trees Work: Fact or Fiction

Which one of the following statements is fiction and which are true? See if you can pick the liar out of the bunch. Hint: Only one is wrong.

1. The forest products industry contributed 7 billion dollars to Missouri's economy in the last year, which is more than the total net worth of Oprah Winfrey and Donald Trump combined.
2. In one year, an acre of trees can absorb as much carbon as is produced by a car driven from St. Joseph to Puxico and back ten times.
3. A 10-percent increase in large trees in a neighborhood has a corresponding drop in crime of 12 percent.
4. Your computer screen is comprised of 85 percent recycled wood products.

Answer: 1-3 are true and 4 is false.

FOLD
HERE



Trees Work. Trees work for your health. Trees work for your family. Trees work for your wallet. Trees work.

Trees Work!

The Missouri Department of Conservation's educational campaign called Trees Work increases awareness of the benefits our trees and forests provide. Many of us appreciate the beauty of an oak releasing its tender spring leaves or a maple shading our deck without being aware of the real and valuable benefits those trees are providing for our health, families, wallets, and environment. The Trees Work campaign lets Missourians know all the ways trees and forests are working for you in your everyday life and provides information on how you can promote good forestry man-

agement no matter how much land you own.

Did you know that being around trees lowers your blood pressure and pulse rate? Kids perform better on tests and have reduced symptoms on ADHD after being in nature. Trees along streets raise home values by \$8,000 on average. Trees work. At the same time that they provide habitat for wildlife, wood products, and shade for our homes, trees work in other incredibly important and surprising ways we are only beginning to understand.

Watch for Trees Work activities and information in your area. Visit treeswork.org to learn more and get involved. Help us spread the message that trees work!

What is it? Bur oak



Bur oak trees can live for hundreds of years. To read more about ordering these seedlings see Page 5.



TREES
MISSOURI DEPARTMENT OF CONSERVATION
PO BOX 119
LICKING MO 65542-0119

What is it?

The answer is revealed on Page 15 of this insert.

